A.D. 1838 . . . . N° 7900.

SPECIFICATION

OF

JAMES CARSON.

SLAUGHTERING ANIMALS.

LONDON:
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A.D. 1838 . . . . N° 7900.

Slaughtering Animals.

CARSON'S SPECIFICATION.

TO ALL TO WHOM THESE PRESENTS SHALL COME, I, JAMES CARSON, of Liverpool, Doctor of Medicine, send greeting.

WHEREAS Her present most Excellent Majesty Queen Victoria, by Her Letters Patent under the Great Seal of Great Britain, bearing date at Westminster, the Twelfth day of December, in the second year of Her reign, did, for Herself, Her heirs, and successors, give and grant unto me, the said James Carson, her especial license that I, the said James Carson, my ex̃ors, adm̃ors, and assigns, or such others as I, the said James Carson, my ex̃ors, adm̃ors, or assigns, should at any time agree with, and no others, from time to time and at all times during the term of years therein expressed, should and lawfully might make, use, exercise, and vend, within England, Wales, and the Town of Berwick-upon-Tweed, and also in all Her said Majesty's Colonies and Plantations abroad, my Invention of "A NEW MODE OF SLAUGHTERING ANIMALS INTENDED FOR HUMAN FOOD;" in which said Letters Patent is contained a proviso, obliging me, the said James Carson, by an instrument in writing under my hand and seal, particularly to describe and ascertain the nature of my said Invention, and in what manner the same is to be performed, and cause the same to be enrolled in Her said Majesty's High Court of Chancery within six calendar months next and immediately after the date of the said recited Letters Patent, as in and by the same, reference being thereunto had, will more fully and at large appear.

NOW KNOW YE, that in compliance with the said proviso, I, the said James Carson, do hereby declare the nature of my said Invention as follows, that is to say:—

The physiological principle upon which it is founded, is that a power of great and extensive use to animal life, is derived from the stretch in which the lungs are held, both in the living and recently dead animal in opposition to their elasticity. In consequence of this power existing after death while the antagonist and controlling power derived from irritability was destroyed with life, the blood and the contents of the lymphatic and lacteal systems are nearly all drained from the arteries and small veins of the larger circulation, and from the lymphatics and lacteals of the parts traversed by that circulation into the blood vessels of the viscera within the chest and into the roots of the larger veins approaching to it.

The object of the mode of slaughtering, which constitutes my said Invention, is to remove the impediments which nature has set up against the elasticity of the lungs, on the existence of which impediments life in a great measure depends, and of course to allow the lungs to resiliate into their natural dimensions, or in other words, to collapse while the animal is still alive; the effect of this method of slaughtering is, to retain the lymphatic and lacteal fluids, and indeed all the finer juices of the body at any point in the same proportion in which they existed while the animal was still alive, instead of being accumulated in the large vessels and discharged out of the body in a mass and becoming a nuisance.

It is necessary for the full accomplishment of the object aimed at by this method of slaughtering, that a pressure at least equal to that of the atmosphere, shall be made to rest upon the external surface of the lungs, and of the other viscera within the chest, from which surfaces a part of that pressure is removed during life, and for a considerable time after the death of the animal by the elasticity of the lungs. This object is accomplished by a free, sufficiently abundant and uninterrupted admission of air into both of the cavities formed by the membrane lining the chest, and that forming the external covering of the lungs, a pressure at least equal to that of the atmosphere being thus brought to rest upon the external surfaces of the organs contained by the chest; the lungs in obedience to their structure collapse when the animal in this situation attempts to inspire and expands the chest, the air required to occupy the increased dimensions instead of entering through the windpipe, in which direction it has to encounter the disengaged elasticity of the lungs, is admitted through other passages, provided in the manner about to be described. The transmission of air through the windpipe, in other words, breathing, is impracticable, and as none of the viscera of the chest will be relieved from any portion of the atmospherical pressure, all suction or draining of the fluids towards the chest is prevented, however extensive that expansion may be; and in further compliance with the said proviso, I, the said James Carson, do hereby describe the manner in which my said Invention is to be performed by the following statement thereof, reference being had to the Drawing annexed, and to the figures and letters marked thereon, that is to say:—

The method for admitting air into the cavities of the chest is the following:—

Figure 1: A tube A, pointed at one end B, and perforated near the point by several holes C, is to communicate at the other end with an air-tight bag D, filled with air and of a size fitted to different animals; a button E is to be placed on this tube with a slight concavity on the side facing the point, and at such a distance from that point as to admit all the holes in it to be within the cavity of the chest, into which it is to be introduced. A tube thus armed is to be introduced by a simple perforation (to be made by a scalpel or lancet) into the cavity of the chest between the fifth and sixth rib on each side of the chest; at the same time, as far as the button will allow it, the concave side of the button is to be filled with some greasy substance and pressed firmly against the side of the animal to prevent any air escaping along the outside of the tube. The air is then to be pressed gently out of the bags through the tubes into the chest, the lungs instantly collapse, and in a minute or two the animal expires. Not a drop of blood is lost in this operation, and if the same vessels be divided, which, in the case of an ox being killed by knocking on the head or pithing would discharge in the course of a minute or two from forty to seventy pounds weight of blood, they would not in this case yield more than a spoonfull or two. A pressure is required to be given to the air introduced additional to that of the atmosphere, in order that when the chest is expanded in the violent efforts which the animal may make to breathe, the air within the chest may still after being thus rarefied, sustain a pressure equal to that of the atmosphere. This will be easily accomplished by keeping a constant pressure upon the air bags; the additional heat required by the air after it has been a few seconds within the chest will aid this effect; by this means any chance of a portion of the atmospherical pressure being removed from the pectoral viscera while it rests wholly upon the rest of the body, will be prevented, and of course all draining of fluids from the body into the viscera of the chest guarded against. For the successful application of this apparatus it is necessary that the animal should be secured against the power of making any extensive movement, or against any accidental change of position, as shewn at Figure 2 with reference to an ox. G is supposed to be a strong beam; H, H, two tackle falls; the animal being thrown on his back, should be drawn up by these tackles fastened to the fore legs till he assumes the position here shewn; his head and hind

part should then be secured to rings in the floor; F is the spot where the perforation is to be made and the instrument of death is to be applied, and the arrow shows the direction it is to take.

Figure 3 is a section of the cavity of the chest showing at J, where the point of the instrument enters to effect its purpose. Lambs, calves, pigs, or sheep may be sufficiently secured by being placed upon an oblong shallow cradle, to each corner of which is fixed a perpendicular post; these posts are fitted with buckles at different heights, by which a limb of the animal is fastened to each post; by these means the animal, without being subjected to much pain, is secured against the power of making any movement or change of position. I need not say that these cradles must be of different dimensions, suiting the bulk of the animals to be placed on them.

But whereas the mode of securing the animal to be slaughtered may vary according to circumstances dependent on the locality where the operation is to be performed, the ingenuity of the operator, or the temper and power of the animal.

And I hereby claim as my Invention only the mode of slaughtering animals intended for human food by causing a pressure at least equal to and better if exceeding the pressure of the atmosphere upon the external surface of the lungs, and of the other viscera in the chest by an abundant and uninterrupted free admission of air into both the cavities formed by the membrane lining the chest, and that forming the external covering of the lungs, thereby causing the lungs to collapse. And such my Invention being to the best of my knowledge and belief entirely new, and never before used within that part of Her said Majesty's United Kingdom of Great Britain and Ireland called England, Her Dominion of Wales, or Town of Berwick-upon-Tweed, or Her Colonies and Plantations abroad, I do hereby declare this to be my Specification of the same, and that I do verily believe this my said Specification doth comply in all respects fully and without reserve or disguise with the proviso in the said herein-before in part recited Letters Patent contained; wherefore I hereby claim to maintain exclusive right and privilege to my said Invention.

In witness whereof, I, the said James Carson, have hereunto set my hand and seal, the Eighteenth day of May, in the year of our Lord One thousand eight hundred and thirty-nine.

JA^{S} CARSON. (L.S.)

Signed, sealed, and delivered by the above-named James Carson, in the presence of

JOHN HOLDEN,
Sol^{r}, Liverpool.

AND BE IT REMEMBERED, that on the Eighteenth day of May, in the year of our Lord 1839, the aforesaid James Carson came before our said Lady the Queen in Her Chancery, and acknowledged the Specification aforesaid, and all and every thing therein contained and specified, in form above written. And also the Specification aforesaid was stamped according to the tenor of the Statute made for that purpose.

Inrolled the Twenty-seventh day of May, in the year of our Lord One thousand eight hundred and thirty-nine.

HOLDEN, Extra.

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A.D. 1838. Dec. 12. Nº 7900.
CARSON'S SPECIFICATION.

(1 SHEET)

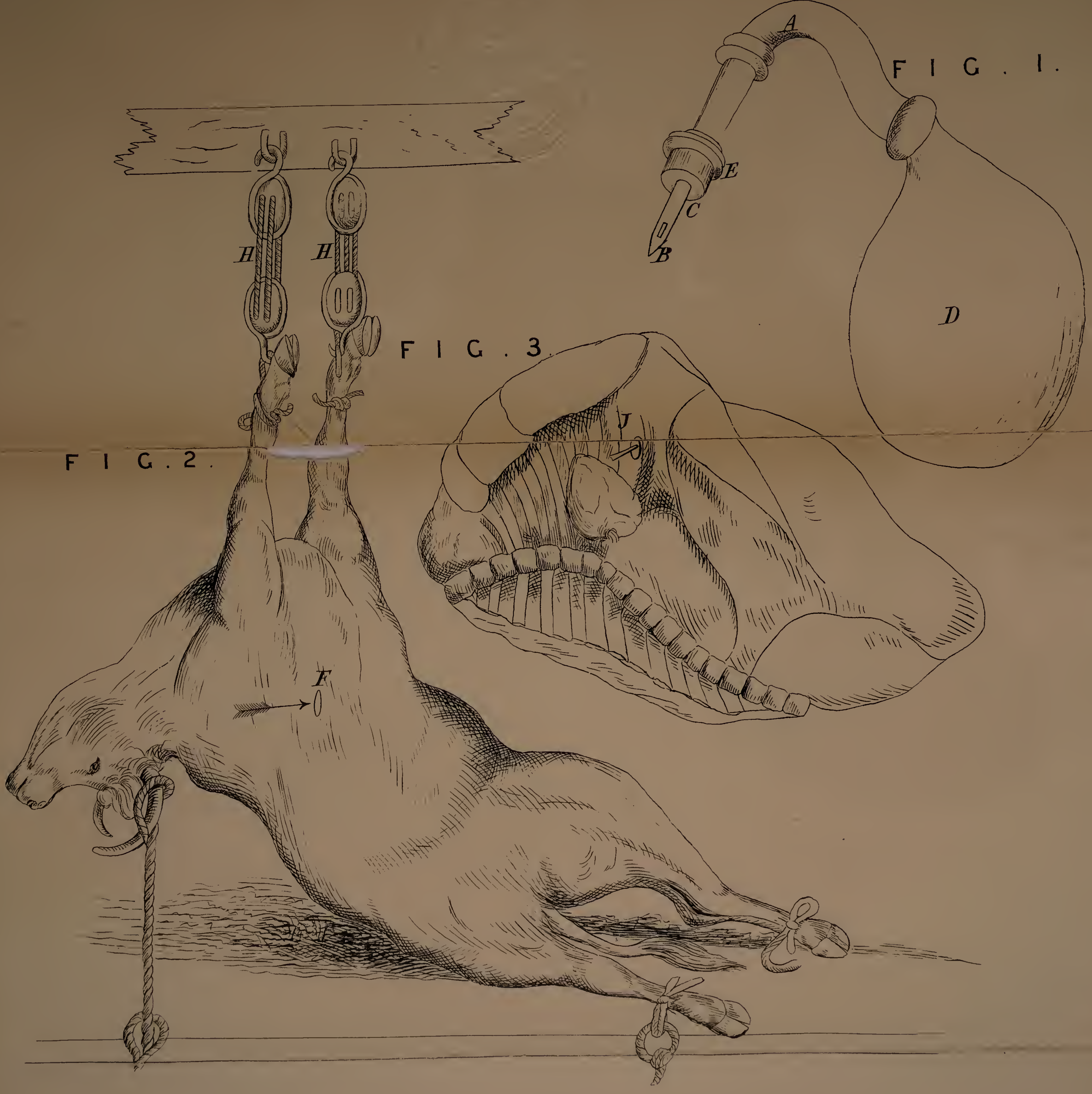

FIG. 1.

FIG. 2.

FIG. 3.

The enrolled drawing is colored

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A.D. 1839. April 3. Nº 8018.
OVERTON'S Specification.

SHEET. 1
(2 SHEETS)

FIG. 1

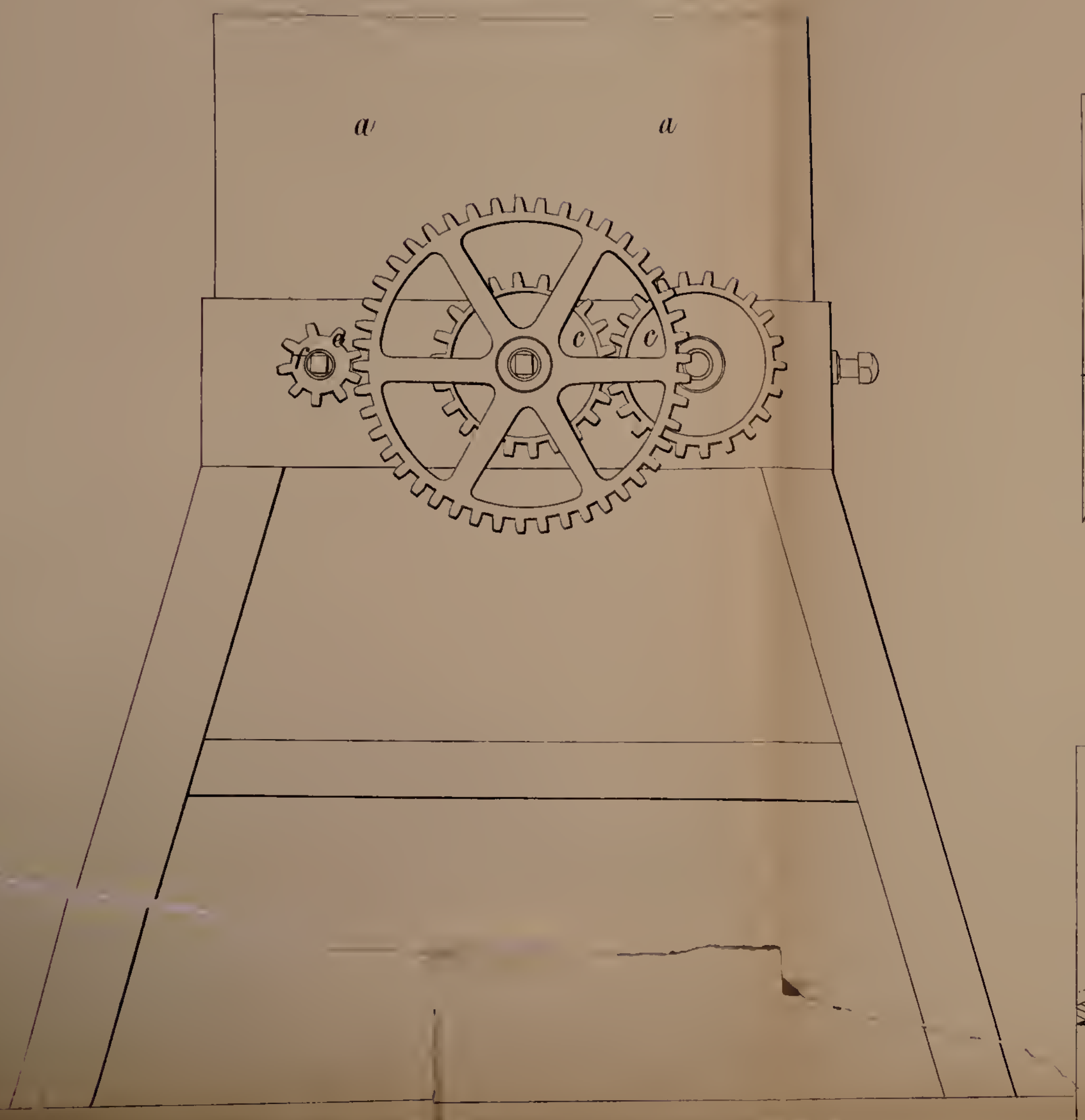


FIG. 2.

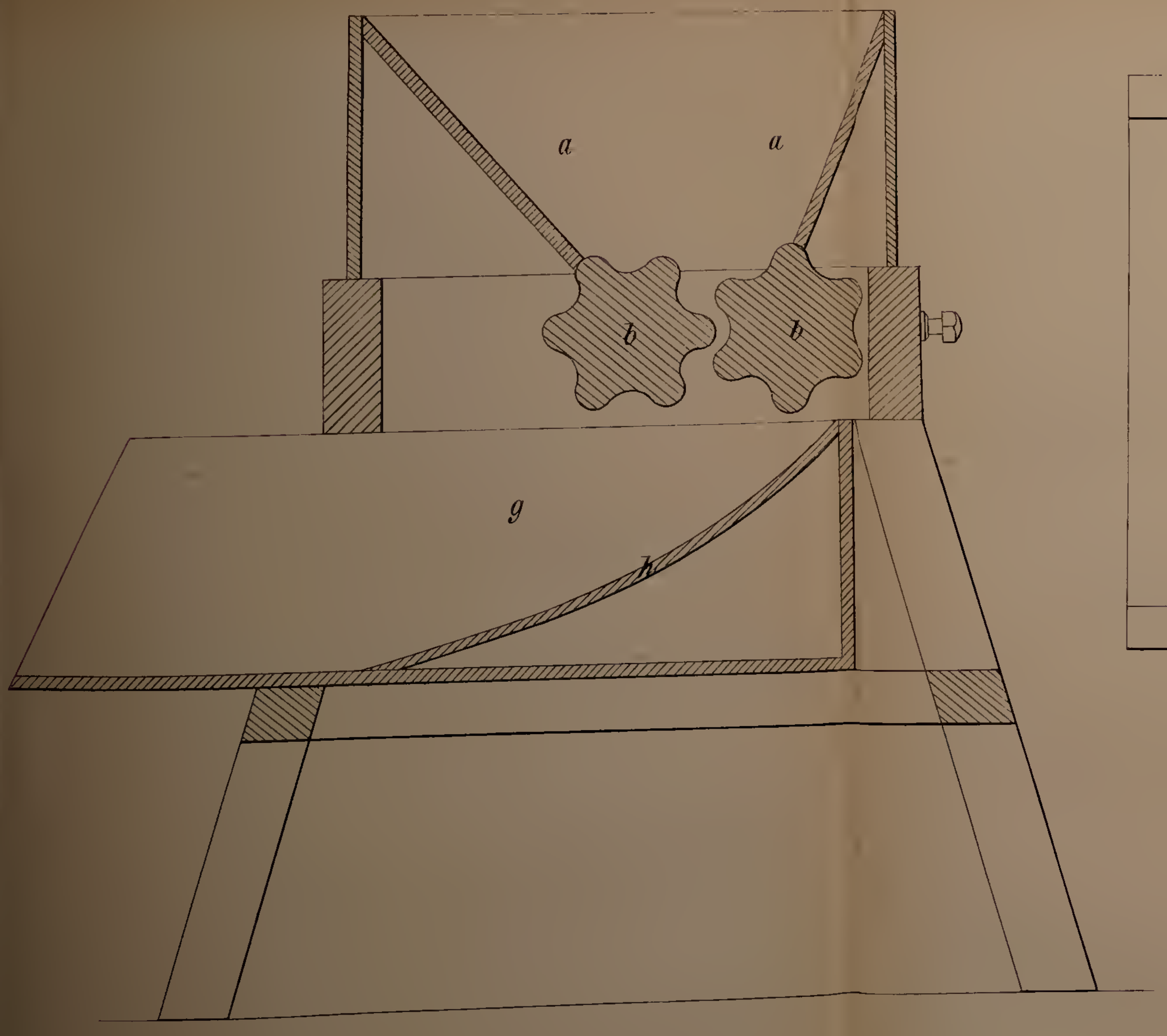


FIG. 3

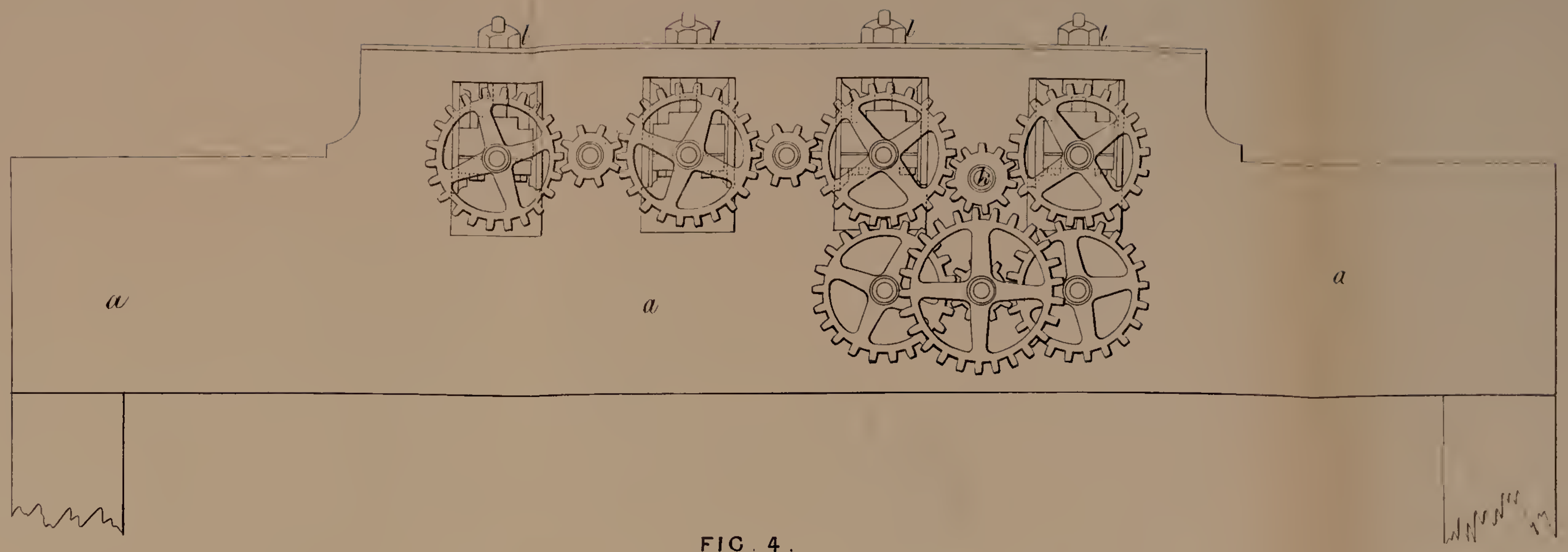


FIG. 4.

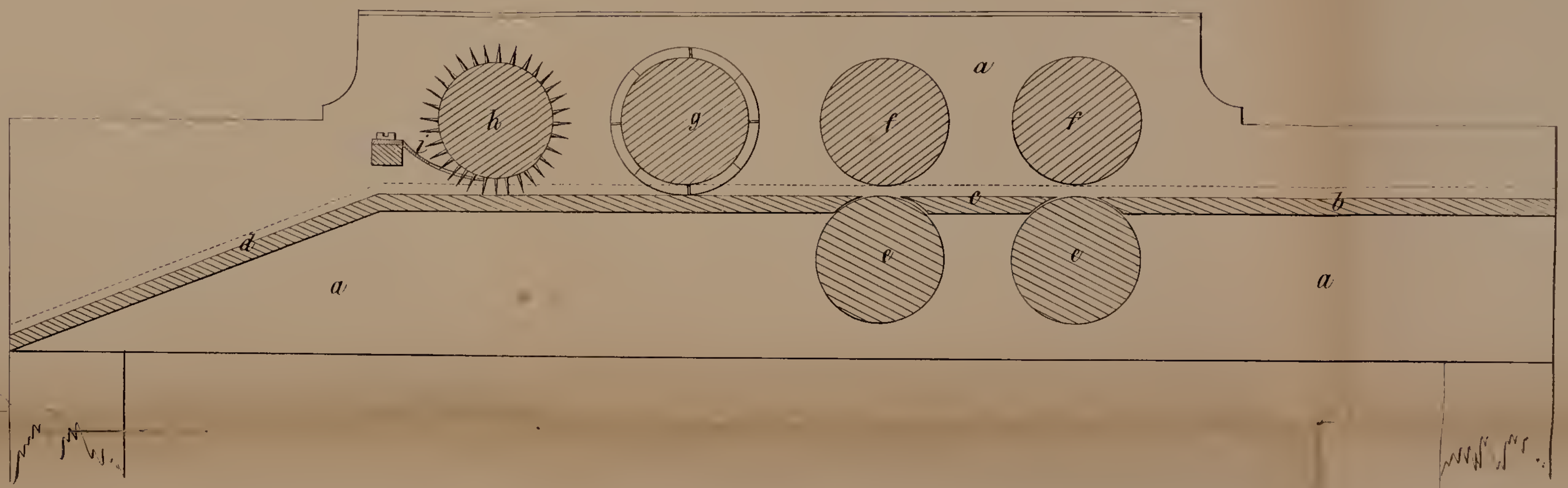


FIG. 5.

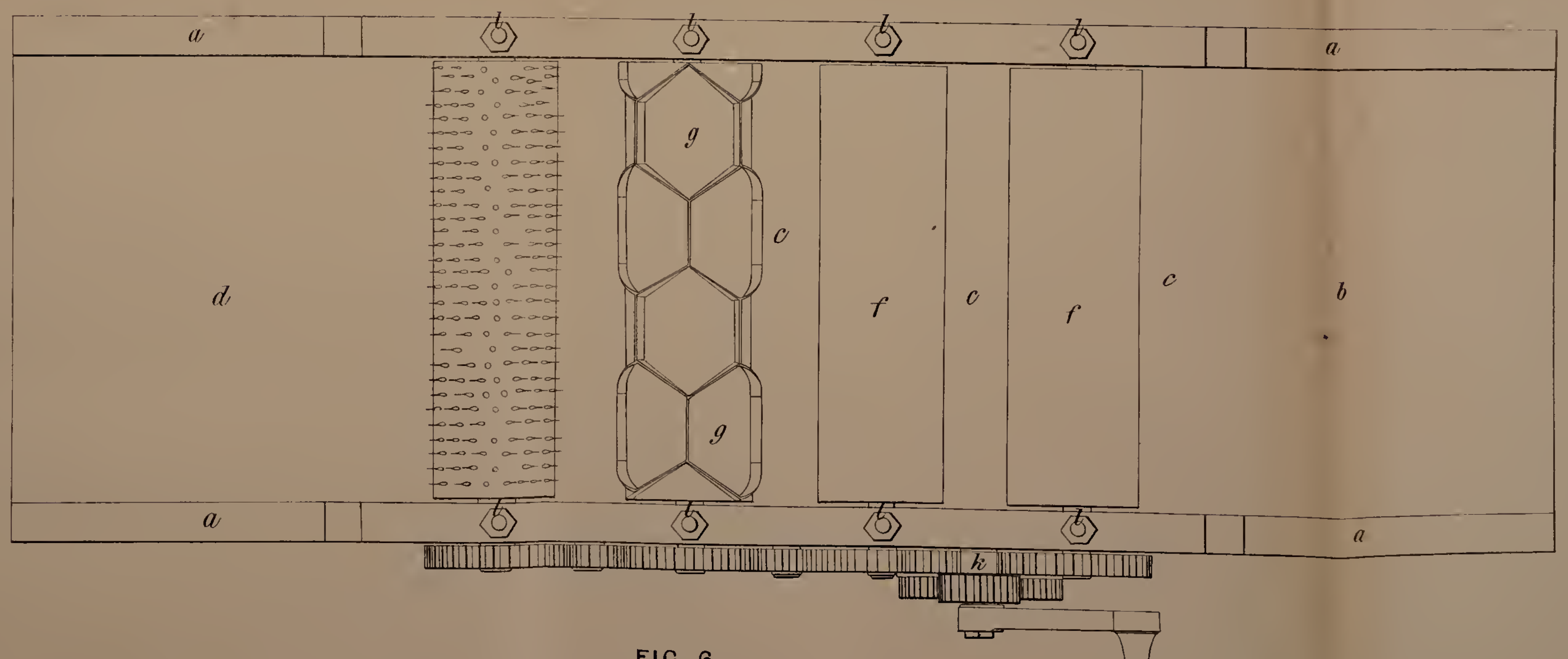
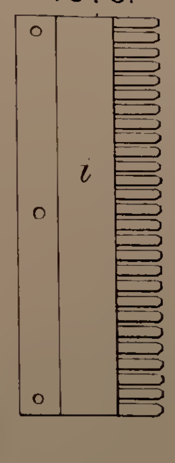


FIG. 6.



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A.D.1839. APRIL 3. N°.8018.
OVERTON'S SPECIFICATION.

(2 SHEETS)

FIG. 7.

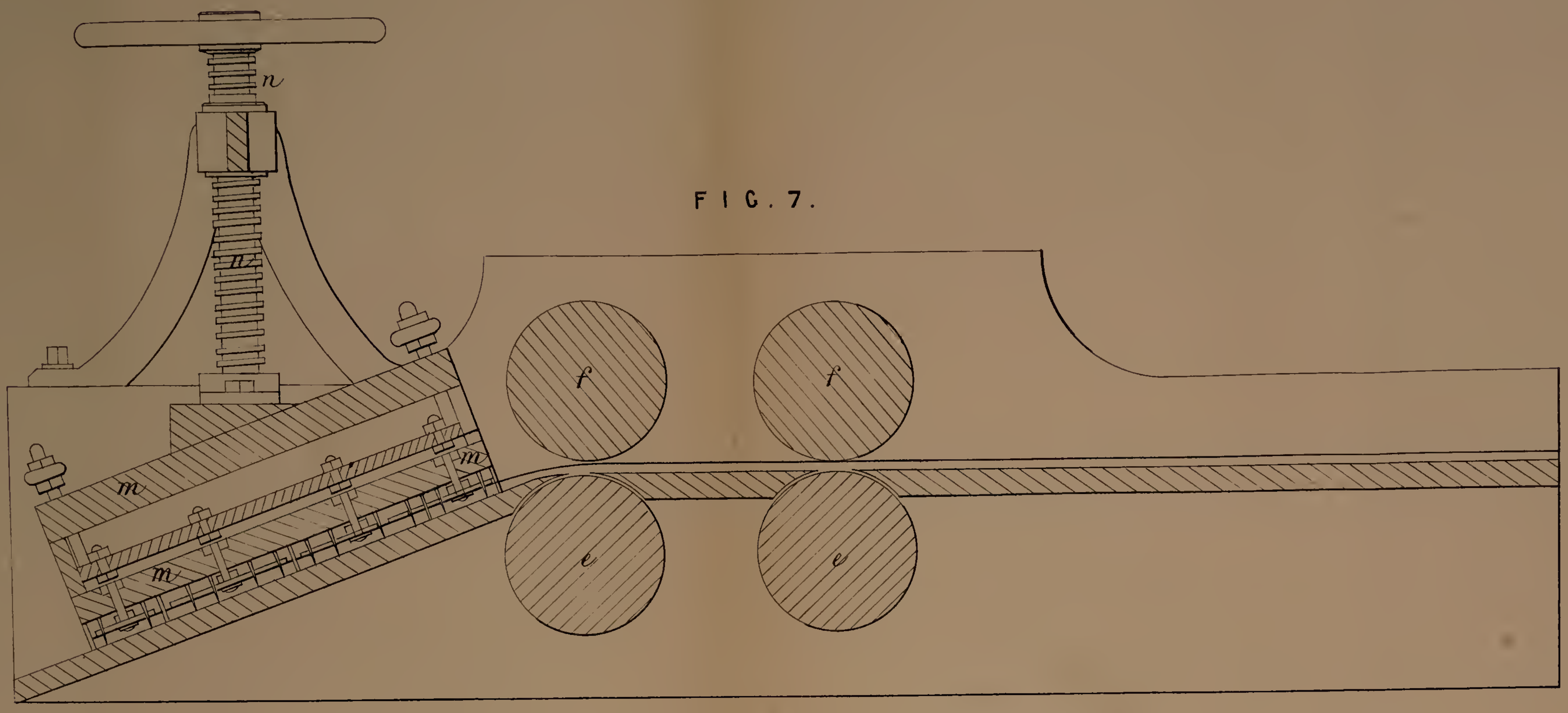


FIG. 8.

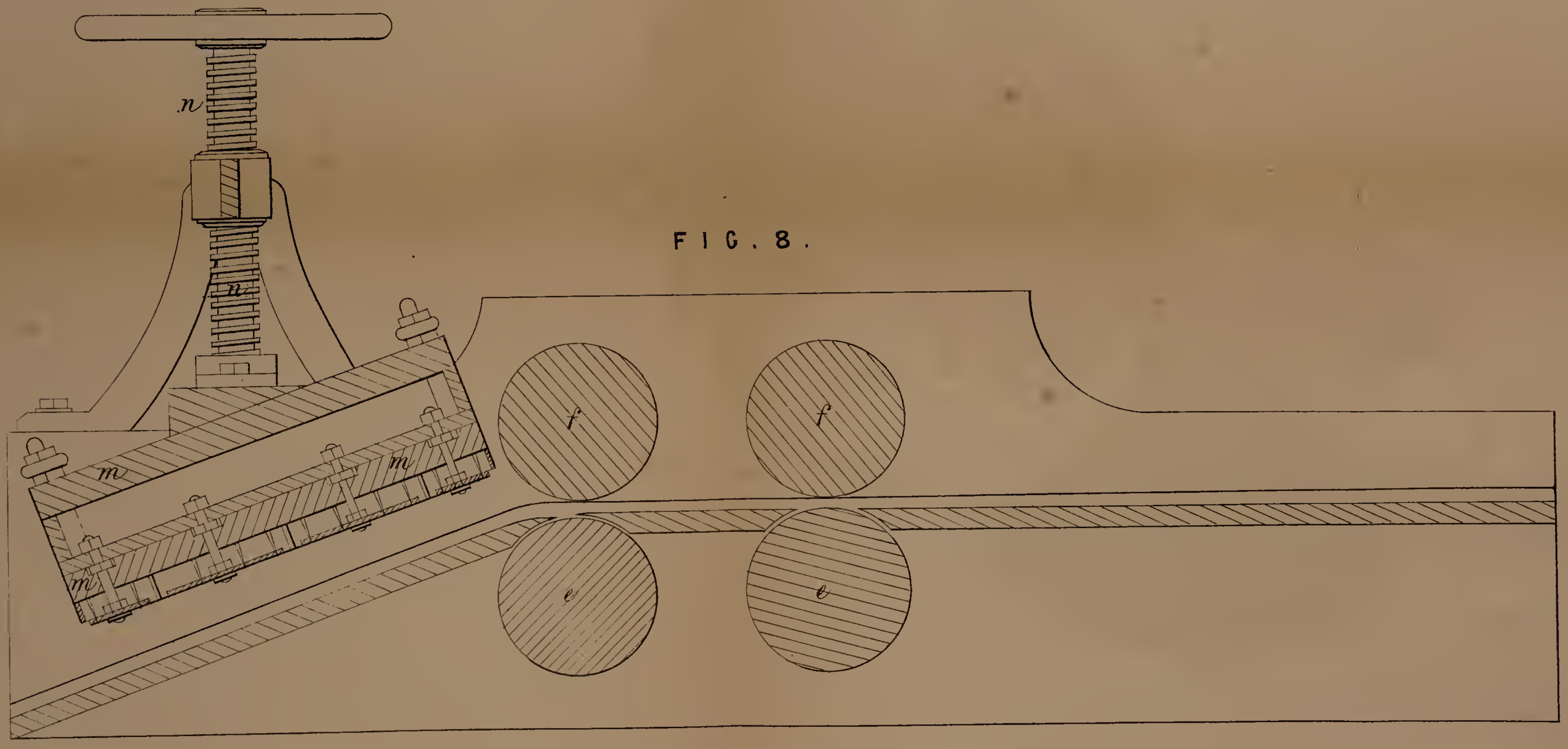
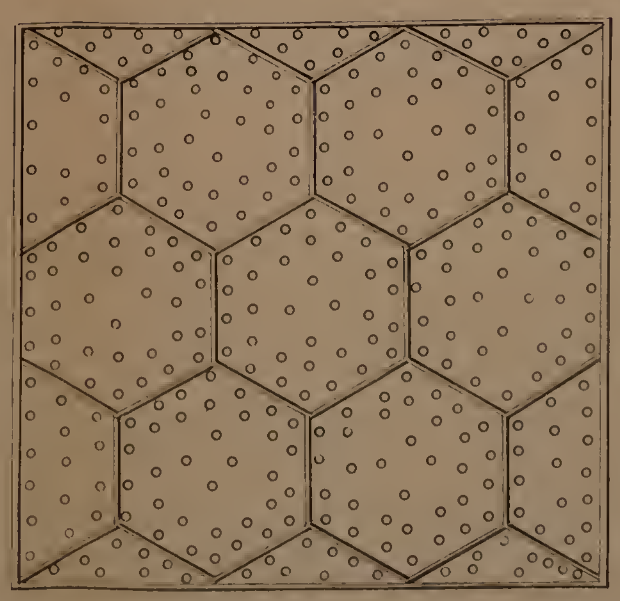


FIG. 9.



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